ANNUAL WATER UALITY REPORT

REPORTING YEAR 2019





Este informe incluye información importante sobre el agua para tomar. Para asistencia en español, llame al teléfono (361) 758-3111, ext. 3151.

PWS ID#: TX2050015

Our Mission Continues

VTe are once again pleased to present our annual water quality report covering all testing performed between January 1 and December 31,

> 2019. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all

Please remember that we are always available should you ever have any questions or concerns about your water.

Water Treatment Process

our water users.

The treatment process consists of a series of steps. First, raw water is drawn from our source and sent to an aeration tank, which allows for oxidation of the high iron levels that are present in the water. The water then goes to a mixing tank, where polyaluminum chloride and soda ash are added. The addition of these substances causes small particles (called floc) to adhere to one another, making them heavy enough to settle into a basin, from which sediment is removed.

Chlorine is then added for disinfection. At this point, the water is filtered through layers of fine coal and silicate sand. As smaller suspended particles are removed, turbidity disappears and clear water emerges.

Chlorine is added again as a precaution against any bacteria that may still be present. (We carefully monitor the amount of chlorine, adding the lowest quantity necessary to protect the safety of your water without compromising taste.) Finally, soda ash (to adjust the final pH and alkalinity), fluoride (to prevent tooth decay), and a corrosion inhibitor (to protect distribution system pipes) are added before the water is pumped to sanitized underground reservoirs and water towers and into your home or business.

Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water during a regularly scheduled council meeting under citizens' comments at City Hall, 600 West Cleveland Boulevard, Aransas Pass.

Source Water Assessment

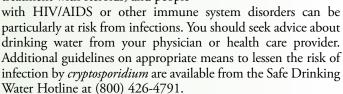
The TCEQ completed a source water susceptibility assessment for all drinking water systems that own their sources. This report describes the susceptibility and types of constituents that may come into contact with the drinking water source based on human activities and natural conditions. The system from which we purchase our water received the assessment report. For more information on source water assessments and protection efforts at our system, contact Michael Bonner at (361) 758-3111, ext. 3155. For more information please refer to Source Water Assessment Viewer at the following URL: https://www. tceq.texas.gov/gis/swaview

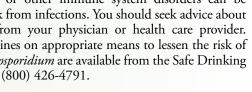
Lead in Home Plumbing

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. This water supply is responsible for providing high-quality drinking water, but we cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at (800) 426-4791 or at www.epa. gov/safewater/lead.

Important Health Information

Tou may be more vulnerable than the general population to certain microbial contaminants, such as cryptosporidium, drinking water. Infants, some elderly, or immunocompromised persons such as those undergoing chemotherapy for cancer; those who have undergone organ transplants; those who are undergoing treatment with steroids; and people







Where Does My Water Come From?

All of the drinking water supplied by the San Patricio Municipal Water District (SPMWD) to local communities comes from a surface water system consisting of Lake Corpus Christi, Choke Canyon Reservoir, and Lake Texana. Water from Choke Canyon and Lake Corpus Christi makes its way down the Nueces River to intake pumps at Callalen, then by pipeline to the SPMWD facilities. Colorado River water is pumped into Lake Texana via pipeline; water at Lake Texana is then pumped through a 101-mile pipeline to SPMWD. Customers served by systems in Ingleside, Aransas Pass, Portland, Taft, Port Aransas, Rockport, and Fulton receive water treated at the water district's plant near Ingleside.

As water travels over the land's surface and down the river, it dissolves naturally occurring minerals and picks up other contaminants. Untreated water may contain bacteria, viruses, salts, and various organic chemicals and radioactive contaminants that can be naturally occurring or the result of animal or human activity.

Treatment plants purify water through a process of chemical treatment, settling, filtration, and disinfection. Water treatment chemicals are added to remove impurities, kill harmful bacteria, eliminate taste and odors, and help prevent tooth decay. The same quality drinking water is then delivered to all residential, commercial, and industrial customers.

Water Loss Audit

In the water loss audit submitted to the Texas Water Development Board during the year covered by this report, our system lost an estimated 39.40 gallons of water per day per connection. If you have any questions about the water loss audit, call (361) 758-3111, ext. 3155.

Safeguard Your Drinking Water

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garde fertilizers and pesticides – they conta hazardous chemicals that can reach ye drinking water source.
- Pick up after your pets.
- If you have your own septic system, prope maintain your system to reduce leaching water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use U.S. EPA's Adopt Your Watershed to locate groups in your community.
- Organize a storm drain stenciling project with others in your neighborhood. Stencil a message next to the street drain reminding people "Dump No Waste – Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.



To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it can acquire naturally occurring minerals, in some cases, radioactive material; and substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and which may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact our business office. For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

The City of Aransas Pass is operating under an exemption due to our water system pressure tank capacity as our elevated storage tank collapsed during Hurricane Harvey. The city has replaced the elevated storage tank, and its construction is in the final stages, but meanwhile, the city continues to maintain adequate pressure throughout the water system with its two pump stations, both with permanent backup generators. An exemption is a State or U.S. EPA permission not to meet an MCL or a treatment technique under certain conditions.

The percentage of total organic carbon (TOC) removal was measured each month, and the system met all TOC removal requirements set.

REGULATED SUBSTANCES								
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE	
Barium (ppm)	2019	2	2	0.106	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	
Chlorine (ppm)	2019	[4]	[4]	4.54	2.395-5.4	No	Water additive used to control microbes	
Fluoride (ppm)	2019	4	4	0.614	0.111-0.94	No	Erosion of natural deposits; water additive that promotes strong teeth	
Haloacetic Acids [HAAs] (ppb)	2019	60	NA	18.5	12–26	No	By-product of drinking water disinfection	
Nitrate (ppm)	2019	10	10	2.33	1.7–2.8	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	
Total Organic Carbon [TOC] (ppm)	2019	$\mathrm{TT}^{\scriptscriptstyle 1}$	NA	5.13	4.56–7.3	No	Naturally present in the environment	
TTHMs [Total Trihalomethanes] (ppb)	2019	80	NA	22.9	18–33	No	By-product of drinking water disinfection	

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2017	1.3	1.3	0.1397	0/5	No	Leaching from wood preservatives
Lead (ppb)	2017	15	0	2.7	0/5	No	Corrosion of household plumbing systems; Erosion of natural deposits

Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90 percent of our lead and copper detections.

AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not applicable

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

SCL (Secondary Contaminant Level): These standards are developed to protect aesthetic qualities of drinking water and are not health based.

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.

SECONDARY SUBSTANCES									
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPL	-	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE		
Manganese (ppb)	201	9 50	NA	NA 1		No	Leaching from natural deposits		
UNREGULATED SUBSTANCES ²									
SUBSTANCE (UNIT OF MEASURE)		YEAR AMOUN SAMPLED DETECT			TYPICAL S	TYPICAL SOURCE			
Bromodichloromethane (ppb)		2019	6.58	3.1–9.5	By-product of drinking water disinfection				
Bromoform (ppb)		2019	5.24	0.50-12	By-produ	By-product of drinking water disinfection			
Dibromochloromethane (ppb)		2019	7.82	3.3–12	By-produ	By-product of drinking water disinfection			
Sulfate (ppm)		2019	36.00	16–61	Naturally	Naturally occurring			

Table Talk

et the most out of the Testing Results data table with this simple suggestion. In less than a minute, you will know all there is to know about your water:

For each substance listed, compare the value in the Amount Detected column against the value in the MCL (or AL, SCL) column. If the Amount Detected value is smaller, your water meets the health and safety standards set for the substance.

Other Table Information Worth Noting

Verify that there were no violations of the state and/or federal standards in the Violation column. If there was a violation, you will see a detailed description of the event in this report.

If there is an ND or a less-than symbol (<), that means that the substance was not detected (i.e., below the detectable limits of the testing equipment).

The Range column displays the lowest and highest sample readings. If there is an NA showing, that means that only a single sample was taken to test for the substance (assuming there is a reported value in the Amount Detected column).

If there is sufficient evidence to indicate from where the substance originates, it will be listed under Typical Source.

- ¹The value reported under Amount Detected for TOC is the lowest ratio of percentage of TOC actually removed to the percentage of TOC required to be removed. A value of greater than one indicates that the water system is in compliance with TOC removal requirements. A value of less than one indicates a violation of the TOC removal requirements.
- ²Unregulated contaminants are those for which U.S. EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist U.S. EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.